GOVERNMENT OF INDIA
HUMAN RESOURCE DEVELOPMENT
LOK SABHA

UNSTARRED QUESTION NO:2991
ANSWERED ON:05.12.2016
Technology Development by IISER
Kothapalli Smt. Geetha

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether the Indian Institute of Science Education and Research (IISER) has recently made any breakthrough regarding development of technology to deal with marine oil spills; and
(b) if so, the details thereof including the time by which the technology can be put to use on the ground?

Answer

MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT
(DR. MAHENDRA NATH PANDEY)

(a) & (b): The researchers of the Indian Institute of Science Education & Research (IISER), Pune, in collaboration with the Central Salt & Marine Chemicals Research Institute (CSMCRI), Bhavnagar and National Chemical Laboratory (NCL), Pune, have developed an ultra-hydro-phobic metal-organic framework based recyclable composite polymer fabric, which shows excellent oil / water separation from mixture phase. The work can potentially be applicable in marine oil spillage.
Similarly, the researchers of IISER Thiruvananthapuram have synthesised phase-selective organogelators (PSOGs) that when applied as powder, can congeal crude oil, benzene, diesel separately from oil-water mixtures. These organogelators are potentially useful for combating large oil spills that contaminate sea water and threaten marine organisms. However, this has been done only in the lab-scale now.
These technologies are still under lab-scale research mode and it is too early to comment on how long it would take to put these for use on the ground.
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